

Public Health Preparedness and Situational Awareness Report: #2019:24

Reporting for the week ending 06/15/19 (MMWR Week #24)

June 21, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

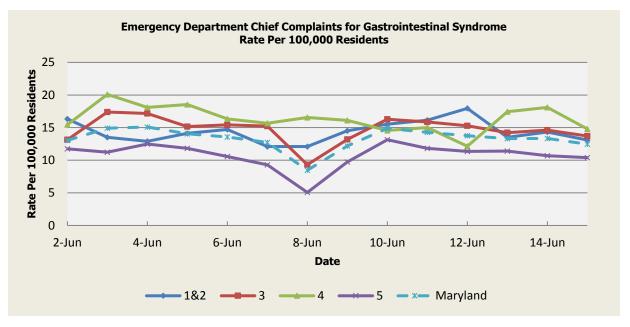
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

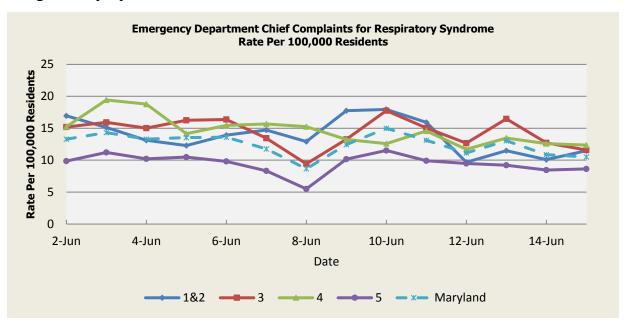


There were no Gastrointestinal Syndrome outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.25	15.11	15.89	10.24	13.15		
Median Rate*	13.11	14.87	15.46	10.13	13.00		

^{*} Per 100,000 Residents

Respiratory Syndrome

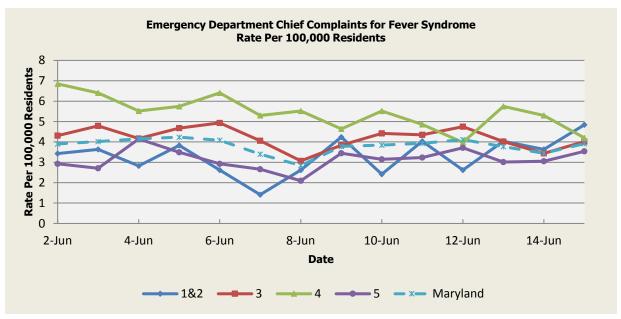


There was one (1) Respiratory Syndrome outbreak reported this week: one (1) outbreak of ILI/Pneumonia in an Assisted Living Facility (Region 4).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.67	14.75	15.08	9.99	12.78	
Median Rate*	12.10	14.21	14.35	9.65	12.28	

^{*} Per 100,000 Residents

Fever Syndrome

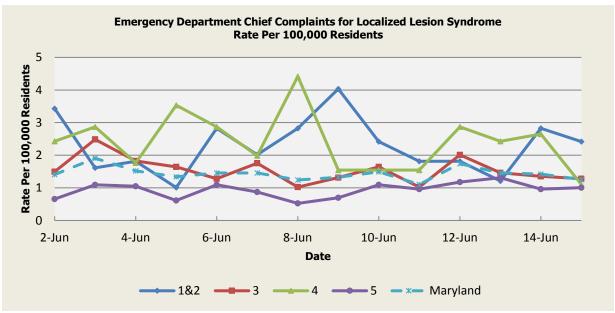


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.07	3.90	4.11	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

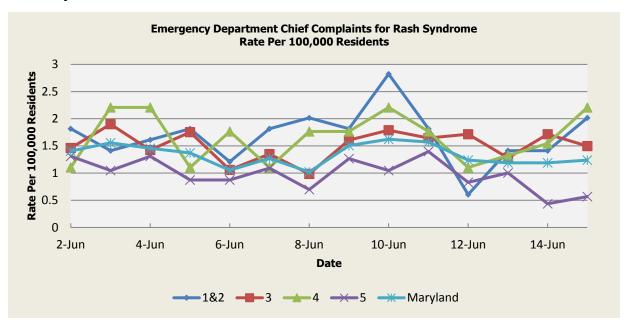


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.12	1.80	2.04	0.91	1.42	
Median Rate*	1.01	1.72	1.99	0.87	1.36	

^{*} Per 100,000 Residents

Rash Syndrome

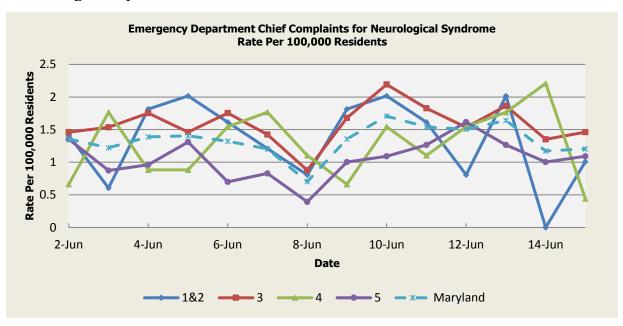


There were two (2) Rash Syndrome outbreaks reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 4); one (1) outbreak of Fifth Disease associated with a School (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.23	1.68	1.76	0.98	1.38	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

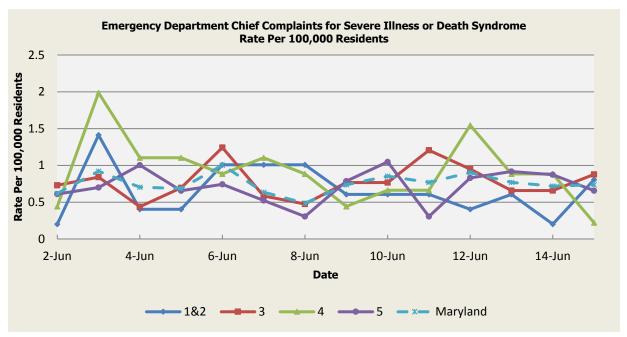


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.77	0.94	0.85	0.59	0.79	
Median Rate*	0.60	0.84	0.66	0.52	0.69	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



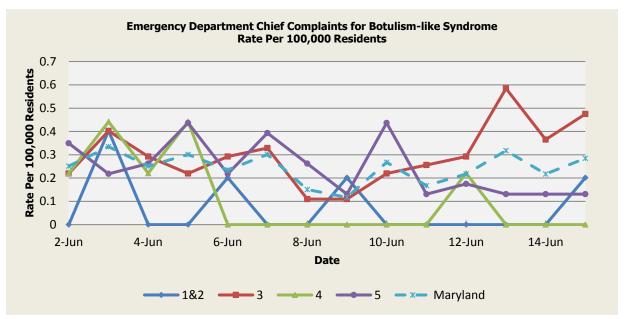
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryland						
Mean Rate*	0.66	0.90	0.83	0.51	0.73		
Median Rate*	0.60	0.84	0.66	0.48	0.69		

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

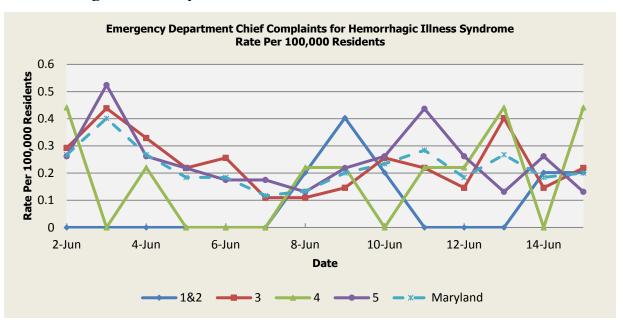


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 6/2 (Regions 4,5), 6/3 (Regions 1&2,3,4,5), 6/4 (Regions 3,4,5), 6/5 (Regions 4,5), 6/6 (Regions 1&2,3,5), 6/7 (Regions 3,5), 6/8 (Region 5), 6/9 (Regions 1&2), 6/10 (Region 5), 6/11 (Region 3), 6/12 (Regions 3,4,5), 6/13 (Region 3), 6/14 (Region 3), 6/15 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.06	0.08	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

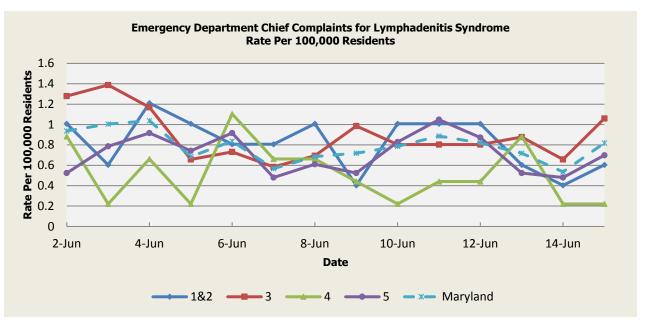


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 6/2 (Regions 2,5), 6/3 (Regions 3,5), 6/4 (Regions 3,4,5), 6/8 (Regions 1&2,4), 6/9 (Regions 1&2,4), 6/10 (Regions 1&2,5), 6/11 (Regions 4,5), 6/12 (Regions 4,5), 6/13 (Regions 3,4), 6/14 (Regions 1&2,5), 6/15 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.11	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 6/2 (Regions 1&2,3,4), 6/3 (Regions 3,5), 6/4 (Regions 1&2,3,5), 6/5 (Regions 1&2,5), 6/6 (Regions 1&2,4,5), 6/7 (Regions 1&2), 6/8 (Regions 1&2), 6/10 (Regions 1&2,5), 6/11 (Regions 1&2,5), 6/12 (Regions 1&2,5), 6/13 (Region 4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.37	0.58	0.40	0.38	0.47		
Median Rate*	0.40	0.47	0.44	0.31	0.42		

^{*} Per 100,000 Residents

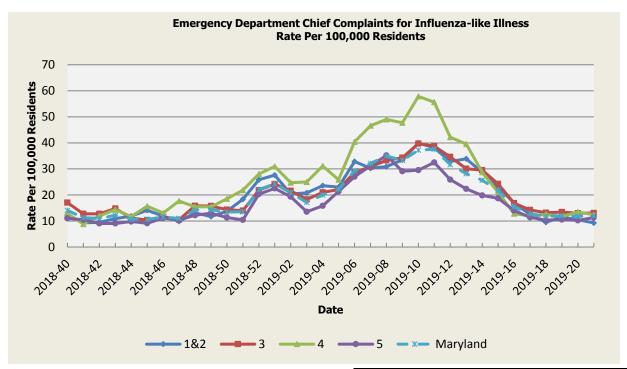
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surfeeds into ESSENCE is currently being validated. We will include once the validation process is complete.	
	(report continues on next page

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

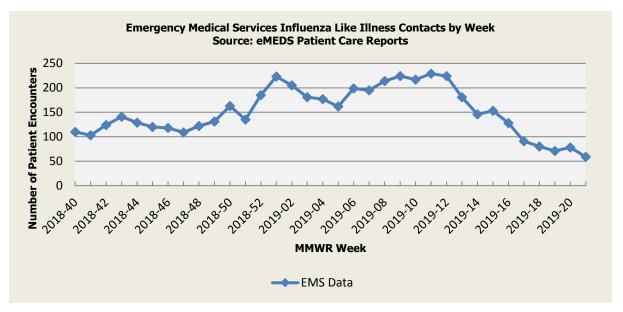
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.26	13.39	12.94	11.33	12.30	
Median Rate*	7.66	10.38	9.27	8.80	9.49	

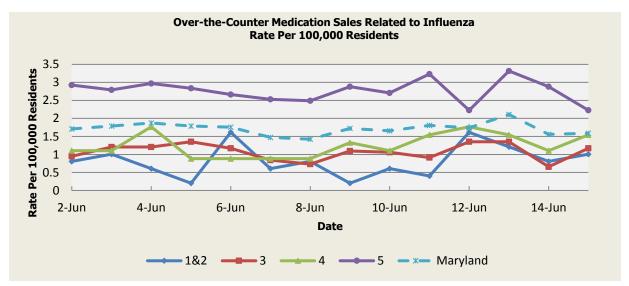
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

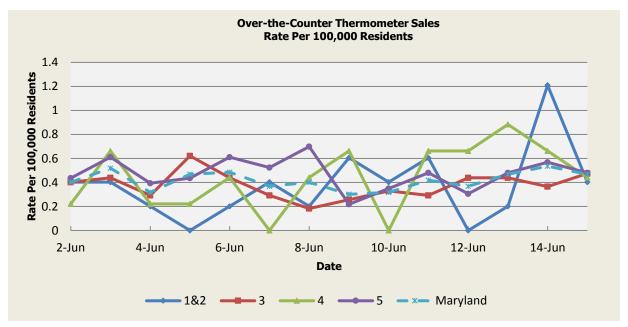


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.54	4.56	2.71	7.97	5.64
Median Rate*	2.82	3.73	2.43	7.25	4.92

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.02	2.88	2.28	3.82	3.21
Median Rate*	2.82	2.74	2.21	3.71	3.10

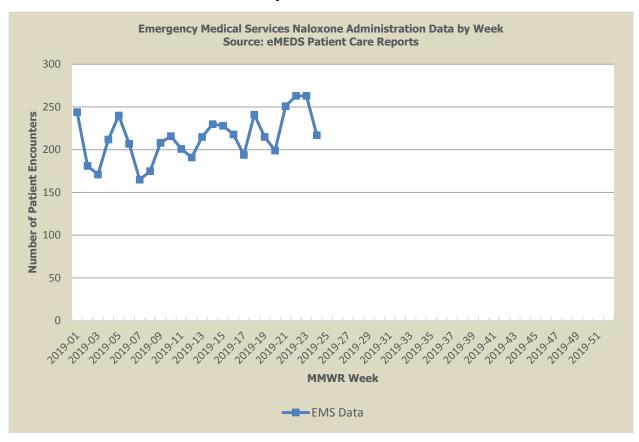
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

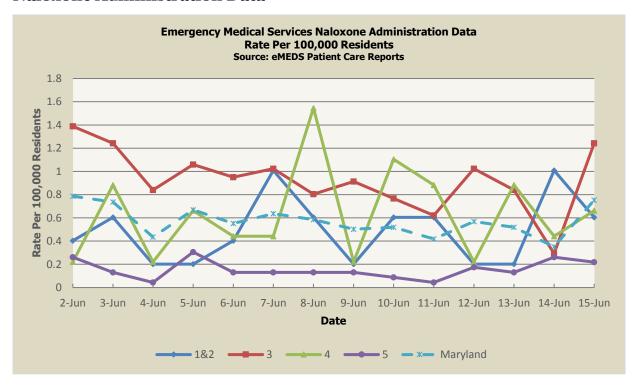
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of June 20, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

INFLUENZA A H3 (BELGIUM), 14 Jun 2019, A poultry farm in Wallonia is the latest affected by the H3 virus, a very mild form of avian influenza currently present in Belgium, according to local media. Since April [2019], dozens of farms have been contaminated in Flanders. The first two Walloon cases are located in Libramont and the province of Liege according to the Federal Agency for Food Safety. Infected hens do not die as a direct result, but are more vulnerable and can catch other diseases. It also causes a drop in egg laying in the birds. Read More: http://www.promedmail.org/post/6520580

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

SALMONELLOSIS (**MULTISTATE**), 15 Jun 2019, The Centers for Disease Control and Prevention (CDC) and public health officials in several states are investigating multiple multistate outbreaks of _Salmonella_ infections with serotypes Agona, Anatum, Braenderup, Infantis, Montevideo, and Newport linked to contact with backyard poultry. As of 7 Jun 2019, 279 people infected with the outbreak strains of _Salmonella_ have been reported from 41 states.

A list of the states and the number of cases in each is on the map of reported cases page. Read More: http://www.promedmail.org/post/6522442

BRUCELLOSIS (DELAWARE), 15 Jun 2019, Delaware state health officials are reminding the public to avoid consuming raw dairy products as it announced a confirmed case of brucellosis caused by _Brucella melitensis_ in a 46-year-old Sussex County woman. The individual was hospitalized and is recovering after being treated for the illness. Prior to becoming ill, the patient in this case had consumed unpasteurized homemade dairy products from Mexico. No other risk factors have been identified. A second, related case of brucellosis is also pending confirmation by the Centers for Disease Control and Prevention (CDC). Read More: http://www.promedmail.org/post/6522381

TYPHOID FEVER (CALIFORNIA, 13 Jun 2019, A Los Angeles police detective has been diagnosed with typhoid fever, a rare illness typically spread through contaminated food or water, and at least 5 other officers who work in the same station are showing symptoms, union officials said Thu 30 May 2019. The 6 officers work in the Central Division station, where a state investigation into unsafe and unsanitary working conditions led to penalties and more than USD 5000 in fines earlier in May 2019, documents show. Read More: http://www.promedmail.org/post/6517254

INTERNATIONAL DISEASE REPORTS

INFANT BOTULISM (**SOUTH KOREA**), 19 Jun 2019, The Korea Centers for Disease Control and Prevention (KCDC) said it confirmed the first case of infant botulism, investigating the routes of the infection. Infant botulism is a disease of the neuromuscular system that occurs in infants aged one year or under. The illness occurs when an infant ingests spores of _Clostridium botulinum_ bacteria, which proliferate in the intestines and produce toxins in the body. Read More: http://www.promedmail.org/post/6528805

NIPAH VIRUS (INDIA), 17 Jun 2019, On 3 Jun [2019], a 23-year-old college student, admitted to a private hospital in Ernakulam, tested positive for Nipah virus. Since then, the health authorities in the state have been on their toes to prevent the virus from spreading. And after almost 2 weeks, Shailaja finally gave the signal that the scare was over. After 12 deaths were reported last year [2018] in Kozhikode and Malappuram districts following a Nipah outbreak, experts had collected samples from bats. Now, fruit bats have been identified as the carriers of the deadly virus. The health department is now conducting studies to find out the reasons behind the second Nipah outbreak. Read More: http://www.promedmail.org/post/6525469

DIPHTHERIA (**CANADA**), 14 Jun 2019, An Edmonton elementary school student with a compromised immune system has been diagnosed with a rare and potentially deadly diphtheria infection yet again. Edmonton Public Schools sent home a letter to families of Evansdale School students, alerting them to a confirmed case of diphtheria. This is the same north Edmonton school where, in 2017, a student was confirmed to have the disease. Read More: http://www.promedmail.org/post/6520393

JAPANESE ENCEPHALITIS (INDIA), 14 Jun 2019, As many as 54 children have died over the past few weeks due to the acute encephalitis syndrome (AES) and over 130 have been hospitalised till now in Bihar in Muzaffarpur. A total of 46 patients died at Sri Krishna Medical College and Hospital (SKMCH) while 8 succumbed at the private Kejriwal Hospital here [Muzaffarpur] on 13 Jun 2019. Read More: http://www.promedmail.org/post/6519707

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health 300 W. Preston Street, Suite 202, Baltimore, MD 21201 Fax: 410-333-5000

Kortney Marshall Graduate Student Intern Office: 410-767-8262

Email: Kortney.Marshall@maryland.gov

Jennifer Stanley, MPH Epidemiologist, Biosurveillance Program Office: 410-767-2074

Email: Jennifer.Stanley@Maryland.gov

Peter Fotang, MPH Epidemiologist, Biosurveillance Program

Office: 410-767-8438

Email: Peter.Fotang@maryland.gov

Jessica Goodell, MPH

Career Epidemiology Field Officer, CDC

Office: 410-767-6745

Email: Jessica.Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

